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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,695	02/12/2004	Nam Ngo		3423
CT GEN 464 S. HILLVIEW DR. MILPITAS, CA 95051				
7590	09/24/2007		EXAMINER ISSAC, ROY P	
			ART UNIT 1623	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/776,695

Applicant(s)

NGO ET AL.

Examiner

Roy P. Issac

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
    Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

Art Unit: 1623

### **DETAILED ACTION**

This application, filed 02/12/2004, does not claim priority from any other applications.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the formula "3-(R1),4-R2),5-(R3),6-(R4)-1,2-dihydrobenzene", without defined the specific R groups R1-R4. Since the R groups are not defined they are not considered further limiting or giving notice to one of skill in the art of the metes and bounds of the claim herein.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 1623

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application; or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 and 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, and 9-11 of U.S. Patent No. 6,590,092. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '092 patent claims a process for using a universal solid support comprising a polysubstituted-1,3-dihydroxybenzene wherein R1-R4 are hydrogen or one of the R group is an alkyl or alkoxy group. The covalent linkage is disclosed as base labile with NH<sub>4</sub>OH/NaOH. (Column 10, Claim 8). The protecting group claimed, monomethoxytrityl is considered an acid labile protecting group. (Column 9, claim 1; Column 6, lines 35-42). Therefore, claims 1-5 and 8 herein are seen to be anticipated by claims 1-3 and 9-11 of the '092 patent.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 1623

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(e) and 102(a) as being anticipated by Ngo N. (U.S. Patent No. 6,590,092; PTO-892).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The '092 patent discloses a process for using a universal solid support comprising a polysubstituted-1,3-dihydroxybenzene wherein R1-R4 are hydrogen or one of the R group is an alkyl or alkoxy group. (Columns 9-11, Claims 1-3, 9-11; Column 5, lines 1-32). Controlled porosity glass is disclosed as typically used solid supports. (Column 1, lines 60-65; Column 10, Claim 9). Trialkyl silyl groups were disclosed as protecting groups. (Column 9, lines 5-15). Note that the description polysubstituted is considered to describe a disubstituted benzene such as 1,2-dihydroxybenzene without further substitutions. The covalent linkage is disclosed as base labile with  $\text{NH}_4\text{OH}/\text{NaOH}$ . (Column 10, Claim 8).

Art Unit: 1623

The protecting group claimed, monomethoxytrityl is considered an acid labile protecting group. (Column 9, claim 1; Column 6, lines 35-42). As such, claims 1-6 and 8 are deemed anticipated by Ngo et. al.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ngo N. (WO 00/69878; PTO-892).

Ngo N. discloses a process for using a universal solid support comprising a polysubstituted-1,3-dihydroxybenzene wherein R1-R4 are hydrogen or one of the R group is an alkyl or alkoxy group. (Pages 13-15, Claims 1-7). Controlled porosity glass is disclosed as typically used solid supports. (Page 2, Paragraph 2). Trialkyl silyl groups were disclosed as protecting groups. (Page 12, lines 1-6). Note that the description polysubstituted is considered to describe a disubstituted benzene such as 1,2-dihydroxybenzene without further substitutions. The covalent linkage is disclosed as base labile with  $\text{NH}_4\text{OH}/\text{NaOH}$ . (Page 17, claim 12). The protecting group disclosed, monomethoxytrityl is considered an acid labile protecting group. As such, claims 1-6 and 8 are deemed anticipated by Ngo et. al.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been

Art Unit: 1623

obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo N. (WO 00/69878; PTO-892) in view of McMurry J. (Organic Chemistry, 3<sup>rd</sup> Edition, 1992, Pages 650-651).

The disclosure of Ngo et. al. is discussed above.

Ngo does not expressly disclose the use of -silyl(alkyl)<sub>3</sub> wherein alkyl is methyl.

McMurry, J. discloses that trimethylsilyl is a commonly used protecting group for hydroxyls and are acid labile.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use trimethylsilyl as a protecting group in place one of the several well known acid labile groups disclosed by Ngo et. al., since trimethylsilyl group (TMS) is one of the ubiquitously used protecting groups in organic chemistry. Therefore, one of ordinary skill in the art would have reasonably expected that the use of TMS in place of one of the similar protecting group disclosed in Ngo et. al. would have resulted in substantially similar or better effects.

Thus the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.


Art Unit: 1623

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy P. Issac whose telephone number is 571-272-2674. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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